

## PATENT COOPERATION TREATY

## PCT



REC'D 02 MAR 2005

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 76.0828 WO/PR	<b>FOR FURTHER ACTION</b> See Form PCT/PEA/416	
International application No. PCT/IB2004/000776	International filing date (day/month/year) 17.03.2004	Priority date (day/month/year) 18.03.2003
International Patent Classification (IPC) or national classification and IPC G06F11/28		
Applicant <b>SCHLUMBERGER SYSTEMES</b> 926.3.14.50		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet. ✓</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 02.10.2004 ✓	Date of completion of this report 03.03.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Renault, S Telephone No. +31 70 340-4543 	

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ON PATENTABILITY**

International application No.  
PCT/IB2004/000776

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-11 as originally filed

**Claims, Numbers**

1-10 as originally filed

**Claims, Pages**

12-14 as originally filed

**Drawings, Sheets**

1/2-2/2 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	
	No: Claims	1-10
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Re Item V.**

1 The following document is referred to in this communication:

D1 : EP 0 606 802 A (GEC ALSTHOM TRANSPORT SA) 20 July 1994 (1994-07-20)

**2 INDEPENDENT CLAIM 1**

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document): a method to secure the execution of at least one module in an electronic unit comprising information processing means and information storage means (procédé de détection en cours de fonctionnement des erreurs d'exécution d'un logiciel industriel de gestion ou de contrôle de réseaux, p. 2, l. 1-4), characterised in that, during the execution of said module, it consists, during the passage of at least one beacon (au passage de chaque instruction exécutée, p. 3, l. 47-49), in storing one or more items of information concerning one or more characteristics of said beacon (calcul d'une signature par combinaison de valeur numérique associées à chacune desdites instructions, p. 3, l. 47-49) and in checking, at at least one checkpoint (à la fin de l'exécution, p. 3, l. 12), the consistency of the information stored about all beacons encountered (vérification de la signature courante avec un ensemble de signatures de référence, p. 3, l. 50).

**3 INDEPENDENT CLAIM 2**

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 2 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document): a method to secure at least one module designated to be integrated in an electronic unit including information processing means and information storage means (procédé de détection d'erreurs d'exécution dans un logiciel destiné à être intégré dans un avion par exemple, p. 2, l. 1-4), characterised in that it integrates automatically in said module equipped with a set of directives (des instructions reliées entre elles par des branchements, p. 2, l. 34) a set of static data (signatures de référence préalablement

calculées lors de la compilation, l. 43-46), beacon functions (fonction de calcul de la signature courante, l. 47-49, p. 5, l. 49-52) and verification functions (vérification de l'appartenance de la signature courante à l'ensemble des signatures de référence, p. 3, l. 50), the first representing a set of valid executions (chemins licites, p. 3, l. 44), the second calculating dynamically a representation of the execution (signature courante calculée lors de chaque exécution affectée au chemin exécuté correspondant à ladite exécution, p. 3, l. 47-49), and the last used to check the consistency of the static and dynamic data (vérification de l'appartenance de la signature courante à l'ensemble des signatures de référence, p. 3, l. 50).

#### **4 INDEPENDENT CLAIM 9**

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 9 is not new in the sense of Article 33(2) PCT.

As the features of claim 9 correspond with features of claim 1, the arguments of paragraph 2 apply mutatis mutandis to claim 9, and therefore claim 9 is not new.

#### **5 DEPENDENT CLAIMS 3-8**

Dependent claims 3-8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), see passages cited in the search report.

#### **6 INDEPENDENT CLAIM 10**

Independent claim 10 does not contain any features which meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT) for the reasons given in paragraphs 2, 3 and 5.

#### **7 ARTICLE 6 PCT**

The set of claims does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined neither concise, because of the presence of more than one independent claim belonging to the same category (two methods claims

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(SEPARATE SHEET)**

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1 and 2).

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